



IS&T Mini Symposium on Neural Computation



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"The Unexpected Units of Vision"

Wednesday, April 13, 2011

3:30 - 4:30 PM

TA-3, Bldg. 1690, Room 102 (CNLS Conference Room)

Abstract: Koffka's (1886 – 1941) question "Why do things look as they do?" comprises a deeper question: "What makes a visual 'thing' a thing in the first place?" Are visual objects made up of universal elements or features that can be enumerated and described? I will present examples demonstrating that visual points, lines, and planes have unexpected complexity, and thereby answer the question that the late Bela Julesz, inventor of the *random dot stereogram* ("magic eye", etc.) expressed in a 1995 talk title, "Why is the early visual system more interesting than the kidney?"

Biography: Ennio Mingolla is a professor and chair of the Department of Cognitive and Neural Systems, at Boston University and Director of CELEST (Center of Excellence for Learning in Education, Science, and Technology, an NSF Science of Learning Center). His research interests include the development and empirical testing of neural network models of visual perception and the transition of these models to technological applications, visual psychophysics, and the computational modeling of brain processes. He received a PhD in experimental psychology from the University of Connecticut.